



"Flight" photograph.

Above is a model of the new Fairey commercial machine ordered by the Air Ministry. The Potez 662 (below) has four small diameter Gnome Rhônes and is probably the fastest transport machine in the world.

signed for such high performance. In any case, the duration of flight will not be more than about 2-2½ hours, so there is not the same necessity for giving ample room.

The tare weight of the Potez 662 (fully equipped and including weight of crew) is 6,220 kg. (13,700 lb.) and the disposable load 2,260 kg. (5,000 lb.), giving a loaded weight of 8,480 kg. (18,700 lb.). The wing span is 22.4 m. (73ft. 6in.) and the wing area 64 sq. m. (689 sq. ft.), so that the wing loading is nearly 30 lb./sq. ft. At the operational height of 13,000ft. the maximum speed is 286 m.p.h.

A development of the four-engined Farman commercial aeroplane shown at the last Paris Aero Show, the Farman 2234 *Jules Verne* exhibited by the French Air Ministry, is intended for sub-stratosphere flying over the North Atlantic. The machine does not appear especially suitable for this kind of work, its flat-sided fuselage being just about the least suitable shape for a pressure cabin. After the experimental flights the machine will be used for carrying mails, and presumably no attempt will be made to make the cabin itself airtight.

Few particulars are available, but the machine is a high-wing strut-braced monoplane, the wings of which show a pronounced taper in contradistinction to

most Farman machines. The four Hispano-Suiza liquid-cooled engines are mounted in tandem pairs on outriggers from the fuselage, and the undercarriage wheels retract into the space between the engines in each nacelle.

The 2234 is being supercharged to fly

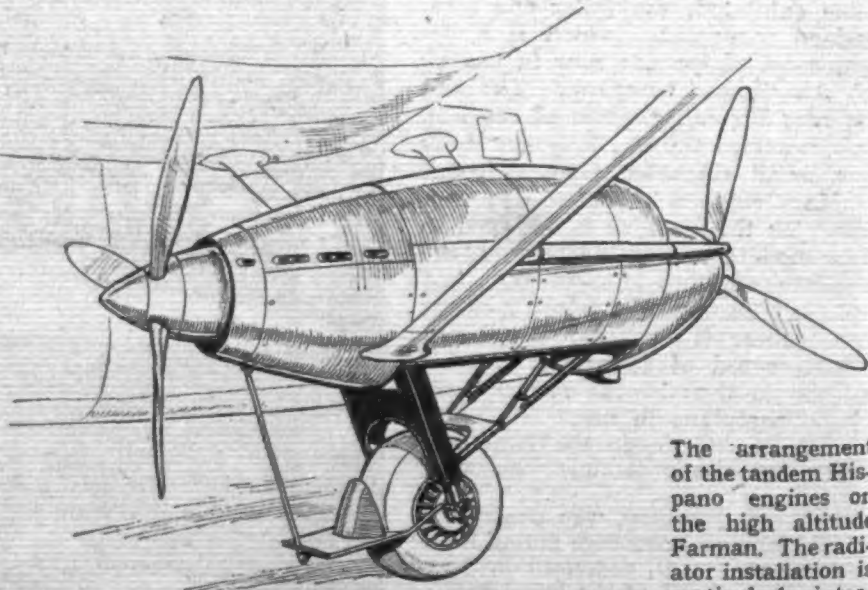
at 20,000-25,000ft., and at that height the cruising speed is expected to be in the neighbourhood of 215 m.p.h. The gross weight is 25,000 kg. (55,000 lb.).

Built as a "flying scale model" of a large transatlantic machine, the CAMS 160 is a small six-engined flying boat of slightly less than one-half the size of the type 161, which it represents. Although the machine has done a good deal of flying, it is of no particular interest in itself, being of wooden construction and not a practical aircraft, although it has doubtless taught its designers quite a lot. The actual 161 will have a gross weight of 40,000 kg. (88,000 lb.) and a wing span of 46 m. (151ft.). Engines totalling 5,580 b.h.p. are assumed, and the range is expected to be 5,000 miles.

An elaborate mock-up of the LeO H. 49, comprising the entire hull, a wing portion, and the tail, is shown by the French Air Ministry. The hull is resting on artificial "water," and looks quite realistic. There is a constant stream of visitors to the extremely spacious cabin inside, in which, for once, space commensurate with long journeys has been provided. Named *Rochambeau*, the actual series number of the machine is the S.E. 200 (from the fact that the Lioré et Olivier firm is now part of the Sud-Est group of nationalised factories). Some idea of the ambitious nature of this project may be formed from the fact that the estimated gross weight will be 60 tons (132,000 lb.) and the wing span 171ft. There will be accommodation for 40 passengers and 9,000 lb. of freight. The commercial load is expected to be 23,000 lb. and the cruising speed 200 m.p.h. A range of 3,700 miles against a head wind of 37 m.p.h. is calculated.

### THE LIGHTER SIDE

It cannot be said that the private owner is well catered for. Few types with any serious claims to attention are exhibited, and the lighter stuff is—well, very light and rather flimsy-looking. Notable exceptions are the Miles Monarch, shown on the de Lavaud stand, and the two Topsy two-seater monoplanes, one with transparent cabin roof and the other open. All these are practical aeroplanes with a serious purpose and an established reputation. It would appear that the explanation is that the large French aircraft firms are concentrating exclusively on military work, and that such light aeroplanes as



The arrangement of the tandem Hispano engines on the high altitude Farman. The radiator installation is particularly interesting.